REMARKS

The Office Action mailed 8 April 2009, has been received and its contents carefully noted. Claims 10-18 were pending, claims 10-15 were rejected and claims 16-18 were withdrawn from consideration. By this amendment, claims 19-25 have been added, and claims 10-18 have been canceled. Support may be found in the specification and the claims as originally filed. No statutory new matter has been added. Therefore, reconsideration and entry of the claims as amended are respectfully requested.

Interview Summary

Applicants appreciate the Examiner and his Supervisor taking the time to conduct a telephonic interview on 7 July 2009. During the interview, in order to overcome the obviousness rejection, the Examiners suggested amending the claims to be consistent with arguments and evidence of unexpected results. Applicants greatly appreciate the Examiners' time and thoughtful consideration.

Rejection under 35 U.S.C. 103(a)

The Examiner rejected claims 1-5 and 7 under 35 U.S.C. 103(a) as being unpatentable over Desbordes (WO99/33812). Specifically, the Examiner deemed that it would be obvious to make the substituted azole compounds of the instant invention based upon the compound taught by Desbordes.

Applicants respectfully wish to clarify the record with respect to the disclosure of Desbordes. Specifically, Applicants have analyzed Desbordes in detail and now understand that for Examples B1 to B7, all compounds set forth in the tables were tested and only the compounds that exhibited activity for the given assay were indicated. Thus, for example, according to Example B1, compound **73** was found to be inactive against *Puccinia recondita* as compound **73** is not recited as one of the active compounds at lines 20-24 on page 53.

According to Desbordes, of all the "G1 compounds", i.e. compounds wherein G is G1 as set forth on page 2, only 29 of 51 compounds exhibited some activity. Of the 51 G1 compounds, compounds **7** to **35** do <u>not</u> have a simple bond for W in structural formula (I) of Desbordes. Thus, compounds **7** to **35** of Desbordes are not compounds which are simply position 3 isomer

isomers of the compounds as set forth in the instant claims. Of the 22 remaining G1 compounds according to Desbordes, only 8 compounds exhibit some activity. Of the 22 remaining G1 compounds according to Desbordes, only 4 compounds contain a CH for Q_1 such that they could be viewed as position 3 isomers of the compounds as instantly claimed. Of these 4 compounds, compounds **73**, **100**, **103** and **116**, only compound **73** exhibited any activity. Specifically, compound **73** exhibited activity in 5 of the 7 activity assays.

Consequently, of the 51 Desbordes compounds only **ONE** compound, compound **73** exhibited activity and can be considered to be a position 3 isomer of the compounds according to the instant invention.

As set forth in Desbordes, three G1 compounds, i.e. compounds **19**, **38** and **39**, exhibited activity in 6 of the 7 activity assays. Not one of these three compounds which exhibit activity in 6 of the 7 activity assays is a G1 compound that could be viewed as a position 3 isomer of the compound as set forth in the instant claims. Specifically, compound **19** has S for W instead of a simple bond, and compounds **38** and **39** have a nitrogen for Q_1 (instead of a CH).

Two-part requirement for obviousness based on structural similarity

According to current case law, an obviousness argument based on structural similarity between claimed and prior art compounds first "depends on a preliminary finding that one of ordinary skill in the art would have selected [the prior art compound] as a lead compound", then there must have been some reason a person of ordinary skill in the art would attempted to modify the lead compound in order to obtain the claimed composition with a reasonable expectation of success. See Procter & Gamble Co. v. Teva Pharmaceuticals, Docket 2008-1404, decided 13 May 2009 (Fed. Cir.) (Federal Circuit held that a position 3 isomer was not obvious where there was no preliminary finding that a person of ordinary skill in the art would have selected the prior art compound (a position 2 isomer) as the lead compound), and Eisai Co. Ltd. v. Dr. Reddy's Labs., 533 F3d 1353 (Fed. Cir. 2008), and Takeda Chem. Indus., Ltd. v. Alphapharm Pty. 492 F3d 1350 (Fed. Cir. 2007).

1. Applicants respectfully submit that the Examiner has failed to set forth a proper obviousness rejection based on structural similarity. It should be noted that Desbordes discloses

a total of 137 compounds. The Examiner has not provided any logical reason as to why one of ordinary skill in the art would have selected compound **73** (or even compound **100**, **103** or **116**) as the lead compound over one of the other 136 compounds. In particular, the Examiner has not provided any logical reasoning as to why one of ordinary skill in the art would have selected compound **73** (or even compound **100**, **103** or **116**) as the lead compound over one of the more active compounds, such as compounds **19**, **38** and **39**, which exhibited activity in **6** of the 7 activity assays. Specifically, compound **73** exhibited activity in only **5** of the 7 activity assays and compounds **100**, **103** and **116** did not exhibit any activity in any of the 7 activity assays. Nowhere does Desbordes teach or suggest a reason why compound **73**, **100**, **103** or **116** would be a better lead compound to further manipulate over the more active compounds **19**, **38** and **39**.

Therefore, a prima facie case of obviousness has not been established and the rejection under 35 U.S.C. 103(a) should be withdrawn.

2. Even if one of ordinary skill in the art selected compound **73** (or one of the inactive compounds **100**, **103** or **116**) as the lead compound for further manipulation, the Examiner has failed to provide any logical reasoning as to why one of ordinary skill in the art would modified the compound to be a position 5 isomer. In particular, nowhere does Desbordes teach or suggest that a position 5 isomer may have antifungal or other biological activity. Applicants have analyzed the substituents set forth in Desbordes and respectfully submit that there is no clear or obvious pattern which would teach or suggest that a particular substituent or combination of substituents confer greater activity over others. Certainly, Desbordes does not teach or suggest that a position 5 isomer (or any other positional isomer) would exhibit antifungal activity or better activity as compared to compound **73**.

Desbordes discloses that compound **73** differs from compounds **100**, **103** and **116** by the presence of a halo substituent for R_3. In particular, compound **73** has a halo for R_3, whereas compounds **100**, **103** and **116** have a hydrogen for R_3. If anything, one of ordinary skill in the art would have believed that R_3 must be a halo substituent in order to confer antifungal activity. Thus, Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to select one of the inactive compounds of Desbordes (compounds **100**, **103** and **116**) and make it into a position 5 isomer with the expectation that the position 5 isomer would exhibit

antifungal activity.

Since one of ordinary skill in the art would not have selected an inactive prior art compound as a lead compound and make it into a positional isomer with a reasonable expectation of success in obtaining an active antifungal compound, the claimed invention is unobvious.

Similar to the GI compounds of Desbordes, Applicants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness based on structural similarity. In particular, the Examiner has not provided any logical reasoning as to why one of ordinary skill in the art would have selected any one of the G4 compounds (compounds wherein G is G4 as set forth on page 2 of Desbordes) as a lead compound to further manipulate it such that the carbon linked to the phenyl ring is changed to a nitrogen and the compound is changed from a position 3 isomer to a position 5 isomer with a reasonable likelihood of success in obtaining an active antifungal compound.

In addition, Applicants respectfully submit that the present invention provides unexpected results. Specifically, as set forth in the instant specification, compounds according to the claimed invention need not have a halo for R_4 (R_3 according to the structure of Desbordes) in order to exhibit antifungal activity. In fact, in view of the lack of any activity for compounds **100**, **103** and **116** it was unexpected that inventive compounds **1**, **2**, **4**, **5**, **11**, **12**, **30**, **69**, **74**, **83**, **84**, **86**, **151**, **165**, **174**, **190**, **247**, **248**, **287**, **356** and **435** as set forth in the instant specification, which do not have a halo for R_4 (R_3 according to the structure of Desbordes), exhibit antifungal activity. Especially surprising is the fact that compounds **1** and **2** according to the present invention exhibit antifungal activity, when compound **103** of Desbordes did not exhibit any activity.

Therefore, in view of the foregoing, Applicants respectfully submit that claimed invention is unobvious and the rejection under 35 U.S.C. 103(a) should be withdrawn.

Request for Rejoinder

Applicants respectfully submit that claims 24 and 25 (formerly claims 8 and 9) are of the same scope as the composition claims which are believed to be allowable. Therefore, rejoinder and examination of claims 24 and 25 are respectfully requested.

Request for Interview

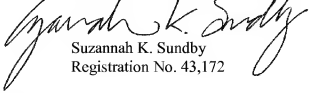
Either a telephonic or an in-person interview is respectfully requested should there be any remaining issues.

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Official action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefor are hereby authorized to be charged to **Deposit Account No. 02-4300**, Attorney Docket No. **034226 M 003**.

Respectfully submitted,



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